



**STATE OF MONTANA
MONTANA DEPARTMENT OF TRANSPORTATION
JOB PROFILE AND EVALUATION**

SECTION I - Identification

Working Title:
Transportation Planner

Department:
Transportation

Class Code Number:
193535

Division & Bureau:
Rail, Transit, and Planning Division
State Highway Traffic Safety Bureau

Class Code Title:
Transportation Planner

Section & Unit:

Pay Band: 5

Work Address:
2701 Prospect Ave.
Helena, MT 59601

Position Number: 36117

Phone: 406-444-3298

☐ FLSA Exempt

☒ FLSA Non-Exempt

Profile Completed By:
Priscilla Sinclair
State Traffic Safety Officer

Work Phone:
444-7417

Jack Williams
Traffic Safety Research Program Specialist

444-3298

Work Unit Mission Statement or Functional Description:

MDT's mission is to serve the public by providing a transportation system and services that emphasize quality, safety, cost effectiveness, economic vitality and sensitivity to the environment. The Director's Office and supporting staff help ensure we achieve our goal of serving the public with pride.

The principal goals of the Rail, Transit and Planning Division are to develop and implement a long-range multimodal construction program that addresses Montana's most important statewide transportation needs, and to support the development and safety of Montana's multimodal transportation system. These dual goals are addressed through the complex interaction and interrelationship of the following bureaus: Data and Statistics, Project Analysis, Multi-modal Planning, and State Highway Traffic Safety, as well as the Program and Policy Analysis Unit.

The State Highway Traffic Safety Bureau promotes public safety, health, and welfare through efforts to reduce traffic crashes, deaths, and injuries. This includes several programs with multiple projects to identify traffic safety problems and establish countermeasures that limit associated personal, social, and economic losses. The Bureau is responsible for planning, managing, funding, and coordinating

highway and local safety programs. Addressing major issues in traffic safety including speeding, lack of use or misuse of safety restraints, driving while using alcohol or other drugs, and the increasing exposure to risks by our yearly increased use of the roadway system (increased risk to pedestrians, drivers, passengers, motorcyclists, and bicyclists). Functions include developing policies and guidance on safety issues; conducting statistical analysis of traffic data; identifying crash clusters; developing an annual safety program based on cost/benefit analysis of crash clusters; improving safety by addressing occupant protection and driver behavior; and providing safety and traffic information.

Describe the Job's Overall Purpose:

This position is a Transportation Planner for the State Highway Traffic Safety Bureau within the Rail, Transit, and Planning Division. The position is responsible for implementing the State Highway Traffic Safety Bureau Research Program; performing research and information technology projects; implementing data gathering and analysis tools (e.g., databases, statistical modeling applications and methodologies, data acquisition and evaluation policies and practices, etc.); and providing training and technical assistance to a variety of agencies and individuals. The position reports to Transportation Planner (#36103), and does not supervise other agency personnel.

SECTION II - Major Duties or Responsibilities

% of Time

A. RESEARCH PROGRAM IMPLEMENTATION

45%

1. Assess statewide traffic safety data needs and provide input on the strategic plan for the State Highway Traffic Safety Bureau Research Program. This involves participating in planning meetings, identifying data deficiencies and ongoing traffic safety issues and trends, reviewing current traffic safety services and programs, assessing changing funding guidelines, and providing input to the Research Program Manager.
2. Implement new traffic safety research and analysis policies and procedures. This involves evaluation of traffic safety products and materials; review of technical papers and manuals; review of special reports and studies; and participation in research and information systems development projects.
3. Research current technical literature and professional publications and review activities of other states and the federal government to stay current with methods of obtaining and exchanging traffic safety data. Recommend new approaches to solving potential data collection, data management systems, and highway safety problems, and identify and recommend software and system changes to Research Program Manager.
4. Provide information for the statewide Problem Identification Paper and other technical reports to assist agency management with decision making, policy formation, allocation of resources, and other managerial functions. This involves researching numerous sources (e.g., agency records, historical traffic safety data, news articles, data of other states, etc.) and analyzing existing and historic state and national traffic and safety issues, studies, and activities to identify data relevant to the agency; analyzing research data to identify major traffic safety problems for possible inclusion in report; evaluating and compiling applicable data; and providing data to the Research Program Manager for potential use in the report.
5. Analyze and interpret various data related to statewide highway safety to explain, both verbally and in writing, fluctuations or unexplained occurrences; to identify and evaluate trends in specific program areas and their causes; and to identify possible countermeasures to address the identified problems by determining appropriate methods for analysis, carrying out the

analysis on various computer systems, and interpreting and explaining the results in terms of implications on highway safety.

6. Prepare narrative, statistical, or fiscal reports as directed for federal grant application, program performance, accountability and monitoring functions. This includes providing traffic safety data in the appropriate format to illustrate agency perspectives, providing data to justify funding, and attending meetings to receive direction on federal changes and interpret this information for local area projects and data cooperators.
7. Implement the research program strategic plan and the statewide Problem Identification Paper as directed. This includes ensuring program objectives are being met, assessing the effectiveness of countermeasures, and recommending adjustments to project plans and priorities as statewide needs and opportunities evolve.
8. Recommend and implement new technologies for the collection and retrieval of statewide traffic safety data to increase the effectiveness and consistency of highway safety studies. This involves identifying agency and statewide traffic data collection needs; conducting research related to available software and systems, data collection practices of other states, advances in technology, etc.; and recommending new technologies based on assessment of agency needs and system capabilities.
9. Update and implement common procedures, policies, manuals, and data definitions for internally developed systems to ensure the accuracy and integrity of system functions and to improve and streamline agency business processes.

B. PROJECT IMPLEMENTATION

25%

1. Identify and recommend project objectives and data requirements for work plans and bid solicitations for contracts in specific areas of research, data processing, and information systems development projects. This involves defining project scope, timelines, and procedures, work review and assessment processes, and project evaluation criteria, and providing this information to the Research Program Manager for use in developing bid solicitations.
2. Perform requirement analysis and project definition to identify project requirements and allocated resources (e.g., costs, staff time, resources, etc.), identify which issues are most critical to project feasibility, and make recommendations on how to prioritize and allocate project resources. Assess existing system resources and applications to determine what can be used, identify internal and external research and information systems coordination needs, and assess available external resources.
3. Conduct feasibility studies to identify and recommend the most effective and cost-efficient methods to meet project objectives. This includes participating in meetings with data requestors and partner agencies; identifying necessary system requirements for enhancement or modification (e.g., database changes, file allocations, application processes, etc.); and assessing cost, staff time, and available resources to ensure that system enhancements and modifications are feasible.
4. Monitor contractor files, reports, and overall performance by conducting periodic quality assurance reviews of work. This involves reviewing random samples of work, on-site field reviews to spot-check, and scheduled reviews. Ensure compliance with all terms and conditions of individual contracts, as well as application of appropriate analytical and evaluation steps.

5. Oversee the payment of claims for contracted services to ensure that services were delivered in compliance with agreements, ensure timely payment and justification, and ensure proper expenditure allocations. This involves review of quality assurance checks of contract work and review of contract agreements to adjust and calculate payments (i.e., there may be a reduction in payment if work does not meet quality standards).
6. Write project reports and evaluations of projects assigned when the contract is completed by incorporating monitoring reports and other information included in each project's documentation and files.
7. Perform the evaluation of the effectiveness of adopted traffic safety countermeasures. This involves identifying data to be evaluated; implementing various statistical studies as directed to measure the effectiveness; and writing reports regarding the analysis of statistical results.
8. Review business requests for data and data usage to identify the most appropriate sources of information, data configurations, and associated analyses needed to meet customer requirements. Research data sources for new and better data feeds.
9. Prepare statistical reports, studies, summaries, research proposals, and special reports related to highway safety or projects as directed. This includes customized statistical surveys (e.g., attitude surveys regarding traffic safety, satisfaction with DUI laws, statewide seatbelt usage, etc.), and surveys and studies in response to legislative interests (e.g., to estimate how many fewer accidents would occur if the legal blood alcohol limit were lowered, to determine the amount of state funds involved in traffic accidents, etc.). Identify information needs of the requestor based on general directives; compile and analyze appropriate data from numerous sources; determine data needs and the scope of study; apply effective data collection procedures and methods; conduct statistical testing of data; and compile results.

C. DATABASE AND STATISTICAL METHODOLOGY IMPLEMENTATION

15%

1. Participate in continuous improvement efforts to enhance database and statistical modeling tools and provide increased functionality and analytical capabilities. Recommend modifications to traffic databases based on interpretation and assessment of internal data requirements. This involves identifying the need for additional traffic data collection (e.g., already have seatbelt data, but now need airbag data; need DUI tracking database, etc.) based on new studies developed by the Research Program Manager, requests from government entities, new traffic technology, changes in traffic laws, etc.; examining and assessing current system capabilities; identifying data management inefficiencies and problems; researching available data streams, software, and systems; and creating databases to meet new and existing internal data requirements.
2. Coordinate with MDT information services staff and the Department of Justice to update and maintain the statewide Crash Records system. This involves assessing business processes at both agencies to determine specific database needs based on analysis of how data will be used, records access needs, system capabilities, etc. to provide input on system design.
3. Modify existing databases and database management systems or coordinate with IT staff or contractors to make changes. Review workflow charts to understand tasks computer will perform, such as updating records. Ensure appropriate testing and debugging is performed to ensure the validity of data.

4. Recommend methods to facilitate access of in-state and out-of-state traffic record systems to streamline the collection of critical traffic data. This involves analysis of existing record systems, hardware, and software; research of new or modified hardware and software that would be compatible with existing systems; and providing input to local governments and others in the development of police and traffic data systems and the purchase of new hardware and software to better interface with state highway safety systems.
5. Recommend new statistical procedures, survey instruments, and data acquisition procedures including forms, materials, and various computer applications used in the analysis and interpretation of traffic and safety data. This involves assessing and interpreting bureau and section objectives and data needs, determining specific data needs, identifying database and other system limitations and capabilities, designing and recommending effective statistical methods and systems to analyze necessary data, and analyzing and interpreting data to provide management with statistically sound conclusions for use in critical decision-making.

D. TRAINING AND TECHNICAL ASSISTANCE

10%

1. Provide training to law enforcement agencies, local organizations, traffic safety advocates, and the public to increase public awareness of traffic safety, to provide information regarding traffic data collection (e.g., data collection, seatbelt surveys, etc.), and to elicit cooperation from law enforcement agencies in the collection and access of traffic data, and in the implementation of countermeasures. This involves developing training program curricula, compiling informational materials, and presenting or coordinating training activities or public information sessions. Represent the State Highway Traffic Safety Bureau in responding to traffic safety questions from attorneys, the media, the concerned public, school representatives, legislators, and others, and conduct research and analysis to effectively respond to inquiries.
2. Provide technical assistance in statistics and data analysis in response to specific information requests from government agencies, the public, the media, private organizations, and others regarding traffic and safety data.
3. Compile, analyze, or interpret available data and information requested by local governments or the public in order to answer their data needs using personal and mainframe computers, or by locating appropriate staff in the Department or other government agencies that possess requested information.
4. Coordinate and provide technical assistance to other Transportation Planners performing data analysis or data collection by verifying that their procedures are statistically valid and reasonable, and by suggesting alternative methods as appropriate when planned or past methods were weak or questionable.
5. Provide technical assistance to other state agencies to link their data information systems to the Traffic Records System.
6. Respond to contractor inquiries regarding specific courses or related issues and provide consultation and technical assistance to provide relevant analytical and evaluation guidelines, procedures, priorities, and other information. Coordinate or provide limited training in these areas as required to promote effective contractor performance.

E. OTHER DUTIES AS ASSIGNED

05%

Perform a variety of other duties as assigned by supervisors in support of the Department's mission and Division objectives. This includes coordinating special projects, participating in various meetings and conferences, attending ongoing education and training, and performing a variety of other duties as assigned by supervisors.

2. *Specific examples of problems solved, decisions made, or procedures followed when performing the most frequent duties of this position include:*

During the performance of the predominant research program development and implementation work, the incumbent solves problems and makes recommendations that impact state highway safety and agency funding. The position solves problems related to the efficiency and effectiveness of traffic data gathering systems and standards, and provides reports and recommendations that assist agency management in decision making, policy formation, resource allocation, legislative proposals, and other critical management activities. As for decisions made, the incumbent makes decisions regarding the adequacy and significance of traffic data collected for highway safety analysis. The position implements statistical studies and must decide where to research necessary data, which collected data should be evaluated for possible inclusion in study, which statistical methods to apply, what the possible implications of the analysis are, and whether the results/implications are significant enough to recommend for the report. These decisions have an impact on the development of highway safety projects and strategic planning.

3. *The most complicated aspect of this position is:*

The most complicated part of the job involves identifying traffic safety problems and evaluating countermeasures that limit associated personal, social, and economic losses. This includes participating in meetings with a wide range of partners and stakeholders statewide to assess current methods of data collection, research, analysis, and evaluation of traffic data as it relates to highway safety. The incumbent implements research studies, recommends automated data collection methods and systems, and implements surveys and other tests to effectively analyze traffic data and identify highway safety problems and issues. This requires knowledge of statistical analysis and data management, as well as an in-depth understanding of traffic safety laws and guidelines, and of the issues and concerns surrounding highway safety. The incumbent must first determine what materials to research and evaluate, apply effective data collection methods and/or systems, identify relevant data, and analyze collected data in order to identify a potential highway safety problem. Then, the incumbent conducts more in-depth analyses as directed, identifies potential implications based on analysis results, and recommends possible solutions to the implied problems/issues.

4. *Guidelines, manuals, or written procedures that support this position include:*

Available laws, regulations, guidelines, and manuals include the Highway Safety Act of 1966; Department and Division policy and procedural manuals; AASHTO and FHWA manuals and standards; various software manuals; other state and federal traffic safety standards; and professional statistical standards and guidelines.

5. *Which of the duties and/or specific tasks listed under 1. (above) are considered "essential functions" that must be performed by this position (with or without accommodations)? (If you need information or training on the identification of essential functions, please contact MDT Human Resources Division.)*

The following duties are considered essential functions because they require specialized expertise and skill and are the primary reasons the job exists:

Duty A: Research Program Implementation
Duty B: Project Implementation
Duty C: Database and Statistical Methodology Implementation
Duty D: Training and Technical Assistance

The following mental and physical demands are associated with these essential functions:

PHYSICAL

- Carrying light items (papers, books, small parts)
- Ability to travel including occasional overnight stays for training, meetings, conferences, and project reviews
- Remaining seated for extended periods of time, with occasional walking, standing, bending
- Consistent use of keyboard
- Communicating in writing, in-person, and over the phone

MENTAL

- Ability to multi-task
- Demands for accuracy in all aspects of work
- Ability to meet inflexible deadlines
- Comparing data
- Copying or transcribing data
- Computing arithmetic operations
- Compiling information
- Analyzing data
- Coordinating multiple activities
- Synthesizing information from a variety of sources
- Negotiating

6. **Does this position supervise others?** ☐ Yes ☒ No

Number directly supervised: n/a

Complexity level of the positions supervised: n/a

Position Number(s) of those supervised: n/a

7. **This position is responsible for:**

- | | | | |
|---|---------------------------------|--------------------------------------|-------------------------------------|
| <input type="checkbox"/> Hiring | <input type="checkbox"/> Firing | <input type="checkbox"/> Supervision | <input type="checkbox"/> Pay Level |
| <input type="checkbox"/> Performance Management | | <input type="checkbox"/> Promotions | <input type="checkbox"/> Discipline |
| <input type="checkbox"/> Other: | | | |

8. **Attach an Organizational Chart.**

ATTACHED

SECTION III - Minimum Qualifications - List minimum requirements for the first day of work.

Critical knowledge and skills required for this position:

Knowledge:

This position requires knowledge of the principles and practices of data analysis and research; transportation planning; strategic planning; state and federal funding requirements; federal grant

requirements; statistical survey analysis; research and evaluation methods and techniques; business administration and computer science including system implementation and system analysis. The position requires a working knowledge of database administration; experience in interpreting State, federal and Department standards, procedures, and specifications; The position requires knowledge of various specialized statistical software packages. Training and technical assistance duties require knowledge of adult education and training methods and techniques; public speaking; and state and federal standards.

Skill:

The position requires skill in analyzing and interpreting statistical information; applying statistical methods, tests, and studies; public speaking; database design; explaining analytical data to individuals of varying technical levels; and skill in effective written and verbal communication. The position also requires skill in the use of standard and specialized software and systems including Access, Excel, and others.

Behaviors required to perform these duties?

MDT Core Behaviors:

CUSTOMER ORIENTATION/SERVICE

Creates an atmosphere in which timely and high quality information flows smoothly between self and customer. Encourages open, honest and constructive expression of ideas and opinions. Demonstrates active listening skills. Uses appropriate body language. Seeks to understand others' viewpoint. Analyzes customer needs and adjusts to the perspective of the customer, when appropriate.

DECISION MAKING

Independently takes action and responsibility for solving problems. Makes decisions designed to achieve desired outcomes. Challenges the status quo by taking calculated actions in complex, ambiguous, contentious or hazardous situations to force an issue or set a direction.

PERSONAL ACCOUNTABILITY AND OWNERSHIP

Takes pride in the job. Actively engages in professional self-development opportunities. Accepts individual responsibility for all actions taken.

LEADERSHIP

Shares information, feedback and knowledge (two-way communication) with key persons inside and outside of the organization to ensure successful project outcomes and/or improvement. Includes training, teaching and coaching others. Actively steps into a leadership role.

ETHICS

Models high standards of honesty, integrity, trust, and openness. Knows, understands, and follows through with the correct standards of conduct and moral judgment required; is willing to act outside the norm when needed to adhere to ethical principles. Communicates and demonstrates actions in a consistent manner. Respects others, regardless of individual capabilities, agendas, opinions or needs.

FLEXIBILITY AND ADAPTABILITY

Accepts change as a healthy and normal part of growth. Receptive to new information and recognizes the validity of various viewpoints; sees situations objectively. Responds positively to changes in direction and priorities, responsibilities or assignments. Adjusts to multiple demands, priorities, ambiguity and change positively. Works effectively within a variety of situations, individuals or groups.

TEAMWORK

Works cooperatively with others as part of a team as opposed to separately or competitively.

CREATIVITY AND PROBLEM-SOLVING

Generates ideas, fresh perspectives and original approaches; open-minded. Uses creativity and originality when problem-solving. Goes beyond traditional ways to address issues and problems.

Additional Required Behaviors:

ANALYTICAL/INTERPRETIVE THINKING

Accurately applies ambiguous research findings, statistical analyses, local needs and objectives, regulations, and project requirements to specific circumstances.

COMMUNICATION

Translates technical information to audiences of varied technical levels.

Education:

Check the one box indicating minimum education requirements for this position for a new employee the first day of work:

- | | |
|---|--|
| <input type="checkbox"/> No education required | <input type="checkbox"/> Related AAS/2-years college/vocational training |
| <input type="checkbox"/> High school diploma or equivalent | <input checked="" type="checkbox"/> Related Bachelor's Degree |
| <input type="checkbox"/> 1-year related college/voc. training | <input type="checkbox"/> Related Master's degree |

Please specify the acceptable and related fields of study:

Required/Acceptable: Planning, Statistics, Information Technology, Mathematics

Related: Closely-related research field

Other education, training, certification, or licensing required (specify):

Experience:

Check the one box indicating minimum work-related experience requirements for this position for a new employee the first day of work:

- | | |
|---|--|
| <input type="checkbox"/> No prior experience required | <input type="checkbox"/> 3 to 4 years |
| <input checked="" type="checkbox"/> 1 year | <input type="checkbox"/> 5 or more years |

Other specific experience (optional):

Serving in an intern program in college can substitute as work related experience. The position requires proficiency and specialized training in a variety of customized statistical software packages (SPSS, SAS, MSU Stat, etc.), Department databases, and specialized skill in database design.

Alternative Qualifications:

This agency will accept alternative methods of obtaining necessary qualifications.

☒ Yes ☐ No

Alternative qualifications include:

A master's degree in a research-related field may substitute for one year of required experience.

SECTION IV – Other Important Job Information

Work is typically performed in a normal office environment with occasional travel.

SECTION V – Signatures

Signature indicates this statement is accurate and complete.

Employee:

Name: _____ Title: _____

Signature: _____ Date: _____

Immediate Supervisor:

Name: _____ Title: _____

Signature: _____ Date: _____

Division/District Administrator:

Name: _____ Title: _____

Signature: _____ Date: _____

Department Designee:

Name: Jennifer Jensen Title: Administrator, Human Resources Division

Signature: _____ Date: _____

Recruitment Review: My signature below attests to my review of and determination that the minimum qualifications (education and experience) listed in this profile meet the established recruitment standards of MDT.

Name: _____ Title: Human Resource Specialist (Helena/District)

Signature: _____ Date: _____